

CLAIMS:

1.-18. (cancelled).

19. (new) A method for data transmission in wireless local area networks in which data transmission is implemented between a first and a second communicant, and in which a first standardized data transmission rule is implemented requiring transmission and/or reception of information elements with variant element formats on electromagnetic signal paths, with the information elements comprising an element identification part, a length statement part and an information part, and the element identification part having a permissible value range in which a first standardized value of the element identification part identifies the information element as a first information element whose information part contains parameters which relate to the data transmission of the communicant in accordance with a first data transmission rule as the transmitter, a receiving communicant storing the parameters for the transmitting communicant in order to set the data transmission for return to the transmitting communicant, and each of the communicants, as the receiver determining the length of the information part from the length statement part on identification of a value of the element identification part outside the permissible value range, and jumping over the information part corresponding to the determined length, the method comprising the step of:

at least in the case of one of the communicants, implementing in addition to the first data transmission rule a second data transmission rule expanding the permissible value range so that a second standardized value of the element identification part identifies the

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information element as a second information element whose information part contains parameters which relate to the data transmission of the transmitting communicant in accordance with the second data transmission rule.

20. (new) The method as claimed in claim 19, characterized in that the first information element contains only parameters which relate to the data transmission in accordance with the first data transmission rule, and the second information element contains only parameters which relate to the data transmission in accordance with the second data transmission rule.

21. (new) The method of claim 19 further comprising the step of jumping over the second information element when a communicant in which only the first data transmission rule is implemented receives the second information element.

22. (new) The method of claim 19 further comprising the step of storing the parameters which relate to the first and second information elements when a communicant in which both data transmission rules are implemented receives the second information element.

23. (new) The method of claim 19 wherein the values in the information part of second information elements represent a set of data transmission rates which are supported by the transmitting communicant in such a way that each value corresponds to one supported data transmission rate.

24. (new) The method of claim 23 wherein the difference between a data transmission rate which corresponds to one value and the data transmission rate which corresponds to the next value is greater than or equal to 500 Kbit/s.
25. (new) The method of claim 24 wherein the difference is 1 Mbit/s.
26. (new) The method of claim 23 wherein at most eight values correspond to the data transmission rates of the first data transmission rule, and all other values correspond to the data transmission rates of the second data transmission rule.
27. (new) The method of claim 23 wherein the second information element additionally contains the values of the data transmission rates which are equal to values for data transmission rates of the first data transmission rule.
28. (new) The method of claim 27 further comprising the step of storing only the parameters which relate to the second information element when a communicant in which both data transmission rules are implemented receives the second information element.
29. (new) The method of claim 23, further comprising the step of:
in addition to the second information element, forming a third or further information element or elements which represents or represent third or further data transmission rules, respectively.
30. (new) The method of claim 23 wherein the data rates in the information element are represented by value pairs, wherein one value codes the data transmission rule itself and the other value codes the data rate, and wherein the coding of the data rate depends on the data transmission rule.

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31. (new) A communication device for data transmission in wireless networks, wherein the communication device can be connected as the first communicant in such networks to a second communicant via electromagnetic signal paths and which has at least one transmitting unit, wherein a first data transmission rule that defines a first information element comprising an element identification part, a length statement part and an information part, is implemented in the communication device, wherein the first data transmission rule defines a permissible value range for the element identification part, the communication device further comprising:

an implementation of a second data transmission rule which expands the value range of the element identification part, and

a transmitting unit configured to send second information elements which are defined by a second standardized value of the element identification part, and whose information part contains parameters which relate to the data transmission in accordance with the second data transmission rule.

32. (new) The communication device of claim 31, further comprising a receiving unit configured for reception of a first and of a second information element.

33. (new) The communication device of claim 31 which is switchable between the first and second data transmission rules in response to the reception of information elements during transmission.

34. (new) The communication device of claim 31, further comprising a memory which is arranged to store parameters which relate to received second information elements.

35. (new) The communication device of claim 31, further comprising a memory which is arranged to store parameters which relate to received first and second information elements.

36. (new) The communication device of claim 31, further comprising an implementation of at least a third data transmission rule which is similar to the implementation of the second data transmission rule.